

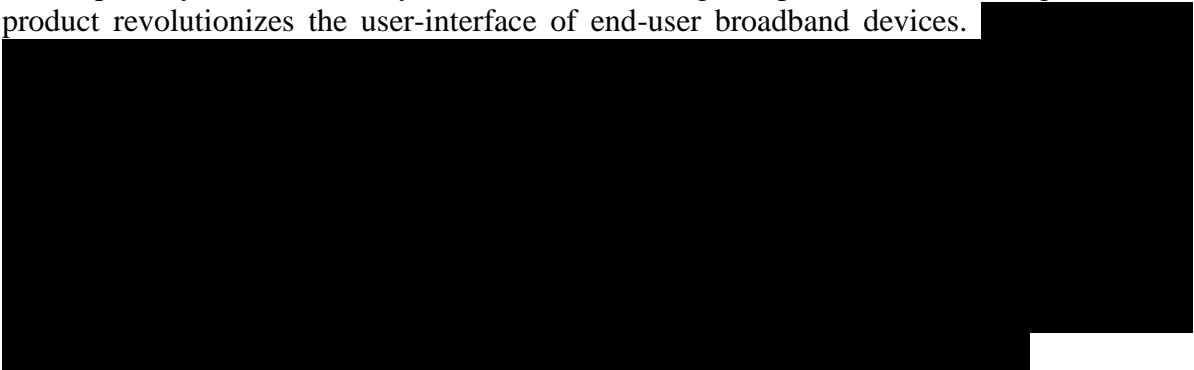
## Executive Summary of Overall Proposal

### STATEMENT OF PROBLEM OR NEED


A core purpose of the BTOP is to stimulate demand for broadband and increase subscribers. A majority of the funds to be allocated will be spent on expanding broadband infrastructure in the hope that additional equipment will itself increase both demand and subscription. Although \$7.2 billion over three years is a lot of money, it is relatively small compared to the total capital expenditures of the five largest U.S. telecommunication companies in a single year (\$43.8 billion in 2008). This reinforces the importance that the funds should be spent strategically to produce lasting worth. We believe that the technology being proposed by Tactus Technology should be part of this strategic approach. In fact, increased infrastructure alone does not address some of the underlying end-user issues that hamper broadband adoption, such as usability. The situation is exacerbated with mobile broadband devices where there is a three-way tradeoff between larger screen size vs. having a physical keyboard vs. size and weight. Moreover, for the growing touch-screen-based broadband device market, individuals with impaired sight, unstable fine motor control (such as many elderly people, those with Parkinson's or arthritis), and other disability find themselves unable to use many new devices.

### APPROACH AND INNOVATION

Tactus Technology is requesting funds to dramatically promote broadband adoption from a different direction. One in which an investment of less than \$20 million will result in sustainably adding millions of additional users of broadband - especially mobile broadband - by making devices more accessible to a greater number of people and improving functionality for the medical community. The problem for these specific segments of the population is the rapidly growing trend in mobile broadband devices to using a touch-screen as the primary, and often only, means of controlling the product and entering data. Our product revolutionizes the user-interface of end-user broadband devices.



### TARGET AREAS, POPULATON, AND POTENTIAL SUBSCRIBERS

Tactus will have its unique user interface incorporated into end-user broadband devices through working with the manufacturers of smartphones, netbooks, tablets and other broadband enabled devices. We are currently in discussions with . All these companies believe that the ability to create buttons on demand in a touch-screen based device will significantly increase demand for mobile broadband products. These companies sell, distribute, and market their products across the entire country, including underserved and rural areas. As such,

we anticipate our product will increase broadband adoption in every Congressional District in the country, and across nearly all demographics.

**THE MEDICAL COMMUNITY.** The medical community and public safety personnel are interested in our technology because the buttons allow for easier typing with reduced typing errors – while also providing a smooth surface that can be easily sanitized. [REDACTED] the unit can be easily wiped clean of germs and disease that regular keyboards trap and may even spread between users. Contamination of mobile and computing device has been validated by scientific research, and is becoming a significant concern for hospitals and medical facilities. [REDACTED]

[REDACTED] This technology is particularly relevant with the increased adoption of electronic medical records. Particularly as computers and mobile devices and their broadband capabilities become more pervasive, it is important to have products that are easily sanitized and that don't increase the error rate of data entry."

**THE DISABLED COMMUNITY.** The elderly, the blind and sight impaired, those with joint or muscular related illnesses, and other disabled individuals find themselves struggling or simply unable to type using the increasingly popular buttonless touch-screen and mobile devices. [REDACTED]

[REDACTED] There are over 10 million people in the U.S. alone who are blind or visually impaired for whom Tactus enabled products open up the world of mobile broadband – and one of the reasons why institutions such as the National Federation of the Blind and the Arthritis Foundation are so interested in our technology. Accessibility is the key to increased broadband adoption by increasing the total addressable market.

#### **QUALIFICATIONS OF APPLICANT**

Tactus Technology has a strong management team, with extensive experience developing products to large scale manufacturing, working with handset manufacturers, and managing government grant contracts. Able to rapidly ramp to speed and achieve mass manufacture in less than 18 months.

Jobs to be saved or created: 51 (includes subcontractors)

Overall cost of the proposed project: \$15.3 million